

SHERIFFS' PENSION & RELIEF FUND

ACTUARIAL VALUATION AS OF
JUNE 30, 2012

G. S. CURRAN & COMPANY, LTD.
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December 28, 2012

Board of Trustees
Sheriffs' Pension & Relief Fund
1225 Nicholson Drive
Baton Rouge, Louisiana 70802

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Sheriffs' Pension & Relief Fund for the fiscal year ending June 30, 2012. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrator and accountants. This report was prepared at the request of the Board of Trustees of the Sheriffs' Pension & Relief Fund. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2013, to recommend the net direct employer contribution rate for fiscal 2014, and to provide information required for the system's financial statements. This report was prepared exclusively for the Sheriffs' Pension & Relief Fund for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

By: _____
Gary Curran, F.C.A., M.A.A.A., A.S.A.

By: _____
Gregory Curran, F.C.A., M.A.A.A., A.S.A.

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Summary of Valuation Results	1
Comments on Data	2
Comments on Actuarial Methods and Assumptions	3
Changes in Plan Provisions	4
Asset Experience	4
Demographics and Liability Experience	5
Funding Analysis and Recommendations	6
Cost of Living Increases.....	8
Graphs.....	9
Exhibit I - Analysis of Actuarially Required Contributions	14
Exhibit II - Present Value of Future Benefits	15
Exhibit III - Schedule A - Market Value of Assets.....	16
Exhibit III - Schedule B – Actuarial Value of Assets	17
Exhibit IV - Present Value of Future Contributions	18
Exhibit V - Change in Frozen Unfunded Actuarial Accrued Liability.....	18
Exhibit VI - Analysis of Increase in Assets	19
Exhibit VII - Fund Balance	20
Exhibit VIII - Pension Benefit Obligation.....	20
Exhibit IX - Cost of Living Adjustments - Target Ratio	21
Exhibit X - Census Data	22
Exhibit XI - Year to Year Comparison	30
Summary of Principal Plan Provisions.....	32
Actuarial Assumptions	36
Glossary	41

SUMMARY OF VALUATION RESULTS SHERIFFS' PENSION & RELIEF FUND

Valuation Date:	June 30, 2012	June 30, 2011
Census Summary: Active Members	14,231	14,754
Retired Members and Survivors	3,922	3,716
Terminated Due a Deferred Benefit	350	323
Terminated Due a Refund	5,056	4,743
Payroll:	\$ 611,139,881	\$ 623,084,570
Benefits in Payment:	\$ 90,894,373	\$ 83,741,250
Frozen Unfunded Accrued Liability	\$ 66,156,793	\$ 68,826,417
Actuarial Asset Value:	\$ 2,042,809,526	\$1,935,179,988
Market Value of Assets:	\$ 1,967,024,952	\$1,907,946,452
Actuarial Accrued Liabilities	\$ 2,108,966,319	\$2,004,006,405
(As defined by GASB-25)		

Ratio of Net AVA to GASB-25 Accrued Liability:	96.86%	96.57%

	FISCAL 2013	FISCAL 2012
Employer Normal Cost (July 1):	\$ 111,154,111	\$ 106,947,304
Amortization Cost (July 1):	\$ 7,784,452	\$ 7,570,127
Gross Employer Actuarially Required Contribution (Including Estimated Administrative Costs):	\$ 125,112,343	\$ 120,370,005
Projected Revenue Sharing, Ad Valorem, and Insurance Premium Taxes	\$ 33,520,517	\$ 32,073,791
Net Direct Actuarially Required Employer Contributions:	\$ 91,591,826	\$ 88,296,214

Actuarially Required Net Direct Contribution Rate:	14.55%	13.78%
Direct Employer Contribution Rate (adjusted for FDA payment)	13.75%	13.75%

Minimum Recommended Net Direct Employer Cont. Rate:	Fiscal 2014: 14.75%	Fiscal 2013: 13.75%
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Employee Contribution Rate: 10% of payroll

Dedicated Funding: 0.50% of ad valorem taxes plus revenue sharing funds and funds from the state's Insurance Premium Taxes as allocated by the Louisiana Public Retirement Systems' Actuarial Committee.

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 7.9% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of system assets adjusted to phase in asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited and adjusted value.

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: The valuation interest rate was lowered from 8% to 7.9% beginning June 30, 2012. In addition, a change was made in the valuation parameters for Back-DROP benefits.

Method of Recognizing Gains and Losses: Under the Frozen Attained Age Normal Method, actuarial gains and losses are spread over future normal costs.

COMMENTS ON DATA

For the valuation, the administrative staff of the system furnished a census on magnetic diskette derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit X, there are 14,231 active members in the system of whom 4,480 have vested retirement benefits; 3,922 former system members or their beneficiaries are receiving retirement benefits. An additional 5,406 terminated members have contributions remaining on deposit with the system; of this number, 350 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. In order to minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records, which have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions, such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas, such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrator for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrator furnished general information related to other aspects of the system's expenses, benefits and funding. Valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. As indicated in the system's audit report, the net market value of the system's assets was \$1,967,024,952 as of June 30, 2012. Net investment income for fiscal 2012 measured on a market value basis amounted to a loss \$3,332,876. Contributions to the system for the fiscal year totaled \$180,233,482; benefits and expenses amounted to \$117,822,106.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Frozen Attained Age Normal actuarial cost method with the unfunded accrued liability frozen as of June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability which was determined to be \$69,702,461 as of June 30, 1989, was amortized over forty years with payments increasing at 3.50% per year. Payroll growth in excess of 3.50% per year will reduce future amortization payments as a percent of payroll; payroll growth less than 3.50% will increase future payments as a percent of payroll. Under the Frozen Attained Age Normal Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs as are contribution surpluses and shortfalls.

Prior to the passage of Act 247 in the 2009 legislative session, in any year in which the net direct employer contribution was scheduled to decrease, the board of trustees could freeze the net direct employer contribution rate and use the excess funds collected, if any, to reduce the frozen unfunded actuarial accrued liability. Notwithstanding such a decrease, payments were made according to the regular amortization schedule, thereby reducing the amortization period. In fiscal 2008 the excess contributions collected from the frozen employer contribution rate reduced the frozen unfunded actuarial accrued liability by \$22,548,024. Based upon the additional contributions collected during fiscal 2008, the current frozen unfunded actuarial accrued liability will be fully amortized by June 30, 2023. Subsequent to June 30, 2008, any surplus contributions collected as a result of R. S. 11:2175.1 are credited to the Funding Deposit Account. The funds may then be used, at the discretion of the Board, to reduce the Unfunded Accrued Liability, future normal costs, or as an offset to direct employer contributions.

Although the current "best estimate range" for the valuation interest rate indicates that the 7.9% assumption is still within the range, it is clearly nearer to the upper limit of the range than to the center. A lower valuation interest rate will provide a higher likelihood of achieving anticipated results and a higher degree of solvency.

The current year actuarial assumptions utilized for the report are outlined on pages thirty-six through thirty-nine. For the prior year, parameters related to the Back-DROP included an assumption that members selected the Back-DROP benefit which maximized the present value of their retirement benefits. A study of retirements over the past four years indicated that some members select options with a value less than the greatest possible present value. As a result of this study, we have incorporated within the Back-DROP parameters an assumption that in the aggregate, members eligible for Back-DROP, elect benefits which are ½% less than the maximum possible present value. With the exception of a change in valuation interest rate from 8% to 7.90% and the change in the Back-DROP parameters, the assumptions used are the same as those used for the prior year report. The changes in plan assumptions increased the normal cost accrual rate by 0.6468%.

All assumptions are in our "best estimate range" for future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2012 Regular Session of the Louisiana Legislature:

Act 225 provided that at such time as the system's frozen unfunded accrued liability shall be fully amortized, the system shall be funded on the Aggregate Funding Method.

Act 527 increased the minimum salary to qualify for membership in the Fund from \$800 per month to \$1,000 per month for members employed subsequent to December 31, 2012.

Act 528 restructured disability benefits to comply with certain provisions of the Internal Revenue Code.

Act 530 allows surviving spouses to have all or part of the lump-sum Back-DROP benefit paid as an annuity at a rate equal to seventy-five percent of the interest rate available to retirees. Surviving spouses with funds on deposit have until June 30, 2013 to make this one-time irrevocable election. For Back-DROP participants who die on or after July 1, 2012, their surviving spouses shall have ninety days from the date of the retiree's death to make this election.

Act 718 increases the required educational hours for trustees from two to four hours of actuarial science information and from one to two hours of education regarding the laws and rules of the system and from one to two hours of instruction on fiduciary duty and ethics.

Act 721 permits the Board of Trustees to grant cost of living increases from funds accumulated in the Funding Deposit Account.

ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below. The rates of return on assets were calculated by assuming a uniform distribution of income and expense throughout the fiscal year.

	<u>Market Value</u>		<u>Actuarial Value</u>
2003	4.2%		0.0%
2004	8.4%		3.0%
2005	8.1%		6.1%
2006	8.5%	*	13.8%
2007	16.0%		10.2%
2008	-6.4%		6.5%
2009	-17.4%	**	-5.0%
2010	10.9%		5.8%
2011	20.2%		5.0%
2012	-0.2%		2.3%

* Includes effect of change in asset valuation method. Effective with 2006 valuation the method of calculating the actuarial value of assets was changed from a three-year smoothing of realized and

unrealized capital gains and losses to a four-year smoothing of all investment returns above or below the current valuation interest rate.

** Includes effect of change in asset valuation method. Effective with 2009 fiscal year, the smoothing period was increased from four to five years and the corridor limits were increased to 85% to 115% of the market value of assets and the final asset value was determined by averaging the smoothed value and the corridor limit if the smoothed value extends beyond the corridor.

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income and dividends. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2012, the fund earned \$31,034,758 of dividends, interest, and other recurring income. Net income was decreased by realized and unrealized capital losses of \$26,958,570. Investment expenses reduced income by \$7,409,064. The geometric mean of the market value rates of return measured over the last ten years was 4.7%. The geometric mean of the market value rates of return measured over the last twenty years was 6.0%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.9% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, and recognized capital gains as given in Exhibit VI. Investment income used to calculate this yield is based upon smoothing earnings above or below the 8% assumed rate of return over a five-year period, subject to constraints as outlined in the section in the report describing actuarial assumptions. (Since the valuation interest rate was changed effective June 30, 2012, smoothing for prior years was based on a valuation interest rate of 8%). The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate over the five-year period. In the future, yields in excess of the 7.9% assumption will reduce future costs; yields below 7.9% will increase future costs. For fiscal 2012 the system experienced net actuarial investment earnings of \$112,044,666 less than the actuarial assumed earnings rate of 8.0%, applicable for fiscal 2012. (For future years, investment income above or below 7.9% will be smoothed over a five year period.) This deficiency in earnings produced an actuarial loss, which increased the normal cost accrual rate by 1.9646%.

DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The average active member is 44 years old with 9.4 years of service and an average salary of \$42,944. The system's active contributing membership decreased during the fiscal year by 523 members. The plan has experienced an increase in the active plan population of 701 members over the last five years. A review of the active census by age indicates that over the last ten years the population in the under-forty age group has decreased while the proportion of active members over-forty increased. During this ten-year period the plan showed a decrease in the percentage of members with service less than five years and a corresponding increase in all other service groups.

The average service retiree is 68 years old with a monthly benefit of \$2,137. The retired population increased by 206 during the last fiscal year. Over the last five years the number of retirees increased by 927. During this same period, annual benefits in payment increased by \$35,422,464.

Plan liability experience for fiscal 2012 was favorable. Salary increases below projected levels, disabilities below projected levels, retiree deaths above projected levels, retirements below

projected levels, and withdrawals above projected levels decreased costs. Overall, plan liability experience decreased the normal cost accrual rate by 0.9460%.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses.

These two components are the normal cost and the amortization payment on the unfunded actuarial accrued liability. The normal cost refers to the portion of annual cost based on the salary of active participants. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. Under the funding method used for the plan, changes in plan experience, benefits, or assumptions do not affect the frozen unfunded actuarial accrued liability. These items increase or decrease future normal costs.

In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL. Thus, the determination of what contribution is actuarially required depends upon the funding method and amortization schedules employed. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2013 as of July 1, 2012, is \$111,154,111. The amortization payment on the fund's frozen unfunded actuarial accrued liability as of July 1, 2012, is \$7,784,452. The total actuarially required contribution is determined by adjusting these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 15 of Exhibit I the total actuarially required contribution for fiscal 2013 is \$125,112,343. When this amount is reduced by projected ad valorem tax contributions, revenue sharing funds, and insurance premium taxes the remaining portion to be funded by direct employer contributions for fiscal 2013 is \$91,591,826. This is 14.55% of projected payroll for the fiscal year.

Liability and asset experience as well as changes in assumptions and benefits can increase or lower plan costs. In addition to these factors, any COLA granted in the prior fiscal year will increase required contributions. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the fund's cost structure are outlined below:

Normal Cost Accrual Rate – Fiscal 2012	18.0591%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	1.9646%
Assumption Loss	0.6468%
Contribution Loss	0.0098%
Factors Decreasing the Normal Cost Accrual Rate:	
Liability Experience Gain	0.9460%
New Members Gain	0.6228%
Normal Cost Accrual Rate – Fiscal 2013	19.1115%

In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule the result will be costs that change as a percentage of payroll. For fiscal 2013, the net effect of the change in payroll on amortization costs was to increase this cost by 0.02% of projected payroll. Required net direct employer contributions are also affected by the available ad valorem taxes, revenue sharing funds, and insurance premium taxes which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that these funds collected in fiscal 2013 will increase by 0.33% of projected payroll.

Although the actuarially required net direct employer contribution rate for fiscal 2013 is 14.55%, the actual employer contribution rate for fiscal 2013 is 13.75% of payroll (i.e. 13.25% directly from employers and 0.50% from the Funding Deposit Account). Any deficit in employer contributions collected in the fiscal year will increase the Fund's normal cost accrual rate. We estimate that this deficit will increase the normal cost accrual rate by 0.08% in fiscal 2014. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%; hence we are recommending a minimum net direct employer contribution rate of 14.75% for fiscal 2014.

Although the minimum recommended direct employer contribution for fiscal 2014 is 14.75%, the Board may allocate funds from the Funding Deposit Account to reduce actual employer contributions. As of June 30, 2012, the balance in this account was \$6,448,956. For Fiscal 2013, the Board allocated \$3,147,415 from the account to offset employer contributions of 0.50% of payroll. When the balance of the account is adjusted for this withdrawal and allocated interest as set forth in R. S. 11:2175.1, we estimate the balance in the Account will be \$3,689,059 as of June 30, 2013. This is equivalent to 0.61% of the estimated payroll for fiscal 2014. The Board may use part or all of the funds to offset contributions in fiscal 2014 or other future years.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the plans' costs to two factors. First, we have determined that based on current assets and demographics, for each percentage earnings in a single

year under (or over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (or reduction) in the normal cost accrual rate of 0.36%. We have also determined that a 1% reduction in the valuation interest rate would increase the actuarially required contribution rate for fiscal 2013 by 8.32%.

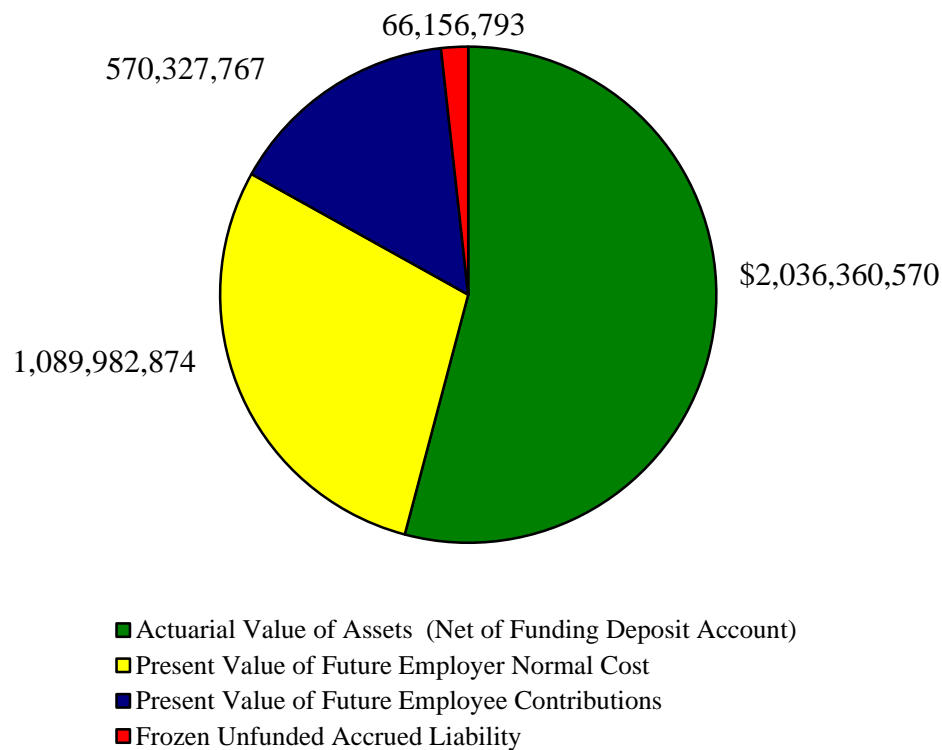
Notwithstanding recent contribution increases, a significant portion of investment losses incurred in fiscal 2009 have not yet been released into the actuarial value of assets due to the current asset smoothing methodology. These losses will be released over the next year and, even when the investment gains for the fiscal 2011 are factored in, this will put upward pressure on costs as they are released into income unless they are offset by substantial asset or liability gains.

COST OF LIVING INCREASES

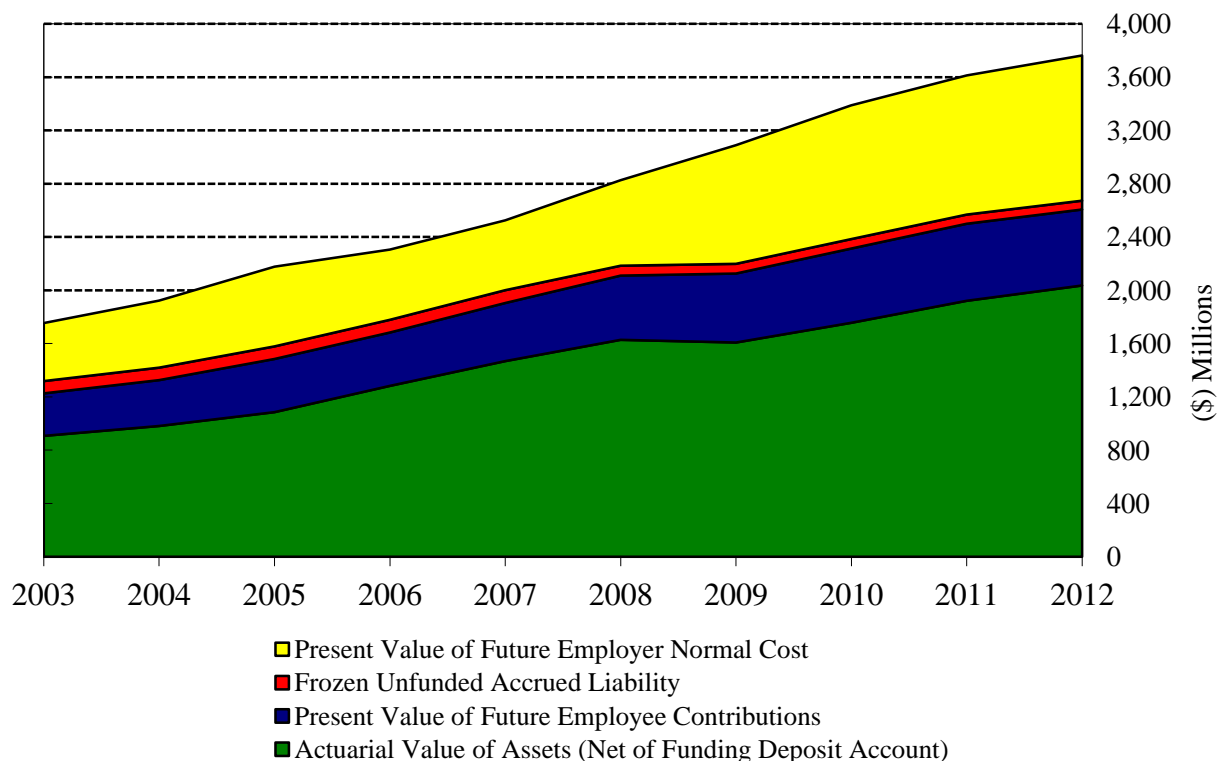
During fiscal 2012, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.66%. Cost of living provisions for the system are detailed in R.S. 11:2178(K) and R.S. 11:246. The former statute allows the board to grant annual cost of living increases of between 2% and 3% of each retiree's benefit with a minimum benefit of \$20 per month.

R.S. 11:246 provides cost of living increases of retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of $\$X \times (A+B)$ where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension benefit Obligation. We have determined that for fiscal 2012, the fund has not met the necessary target ratio and that the plan's investment experience was below assumptions. Therefore, the Fund is unable to grant COLAs to retirees at this time under the provisions of R.S. 11:2178(K) and R.S. 11:246.

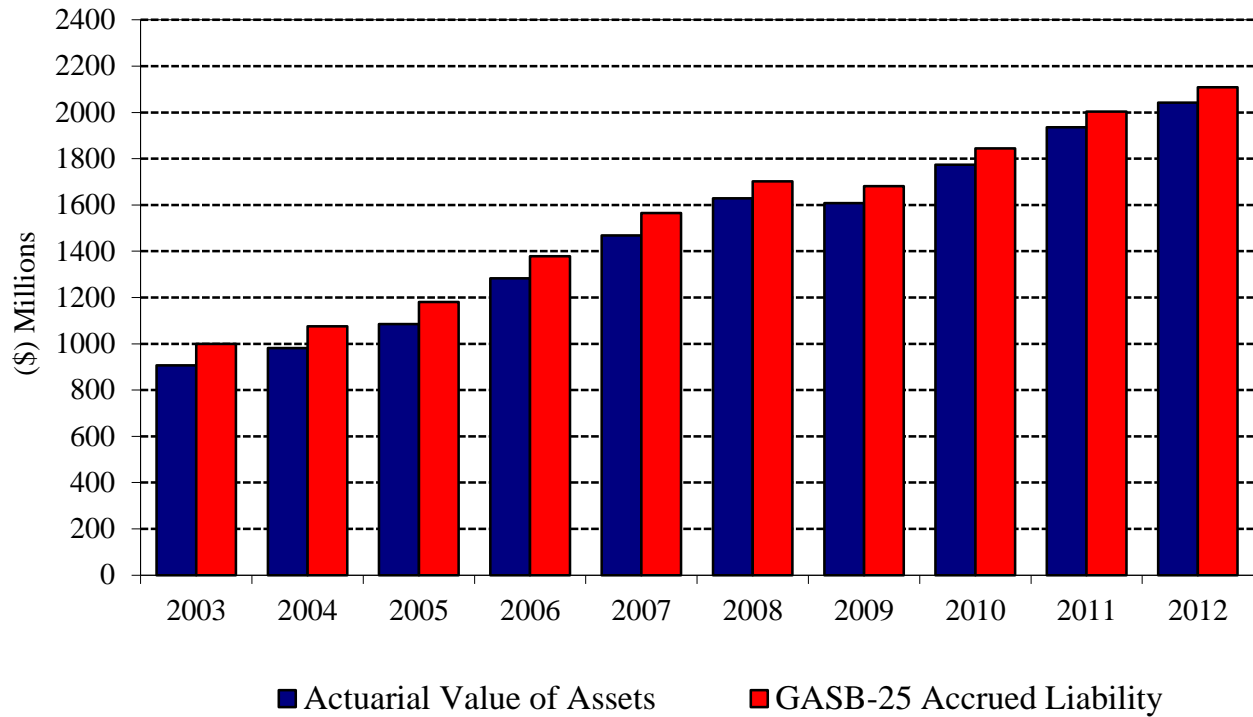
Components of Present Value of Future Benefits June 30, 2012



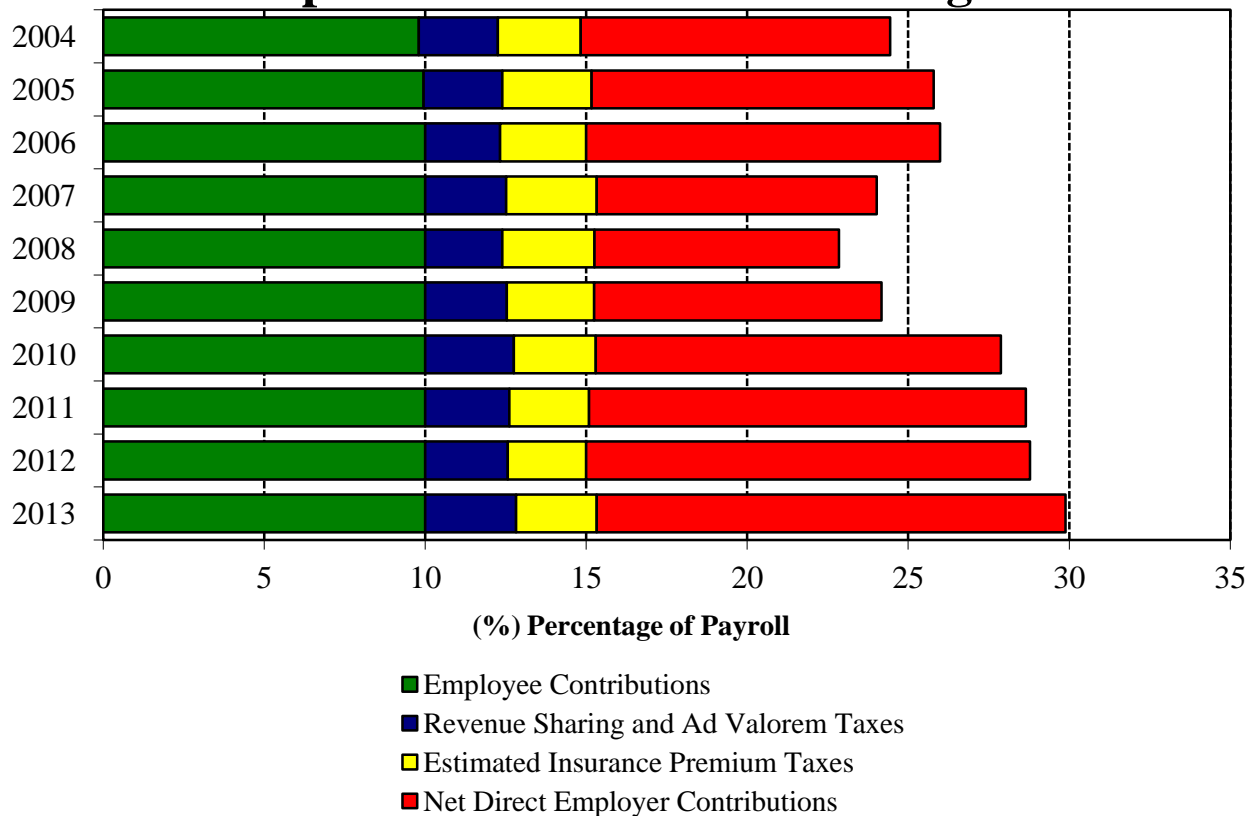
Components of Present Value of Future Benefits



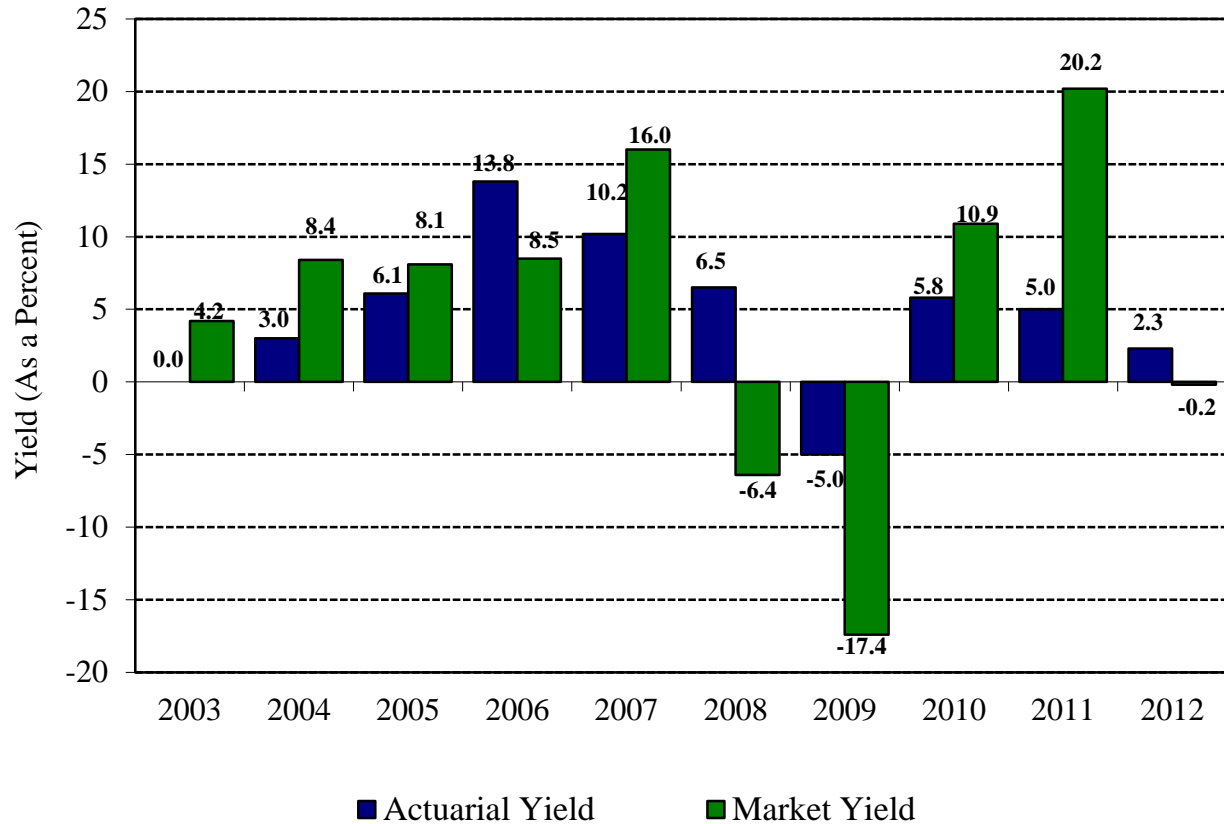
Actuarial Value of Assets vs. GASB-25 Accrued Liability



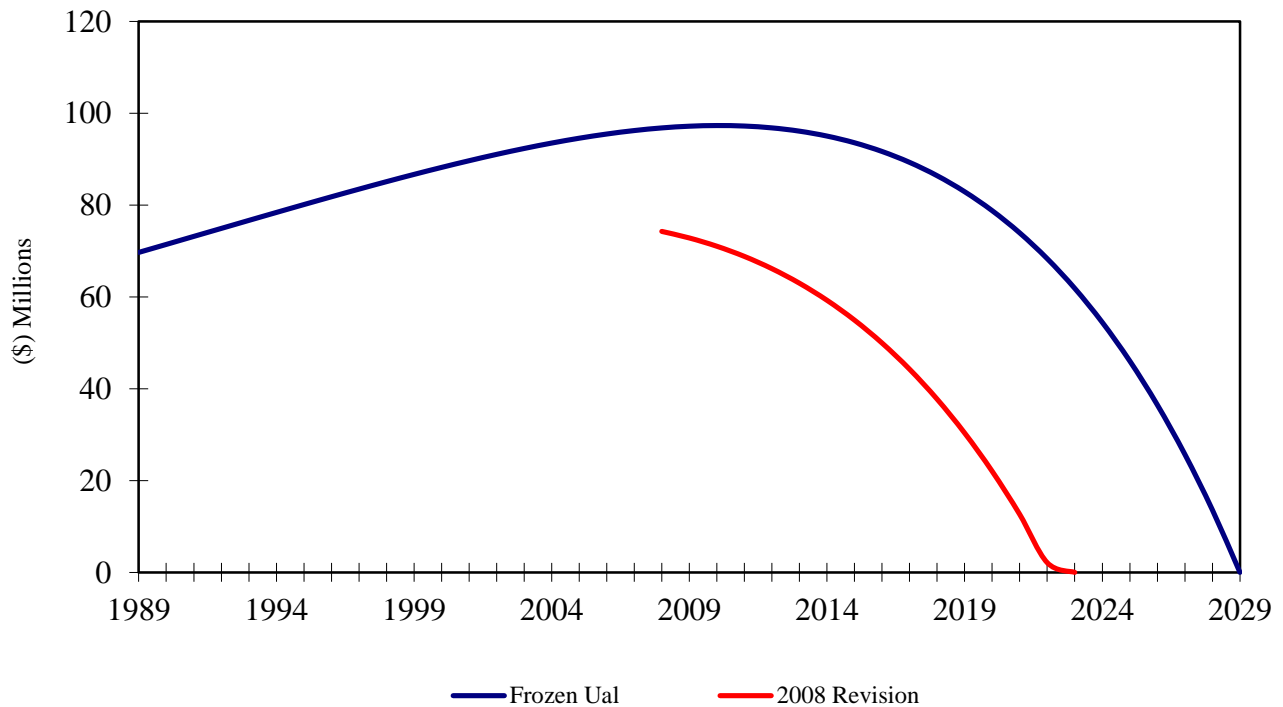
Components of Actuarial Funding



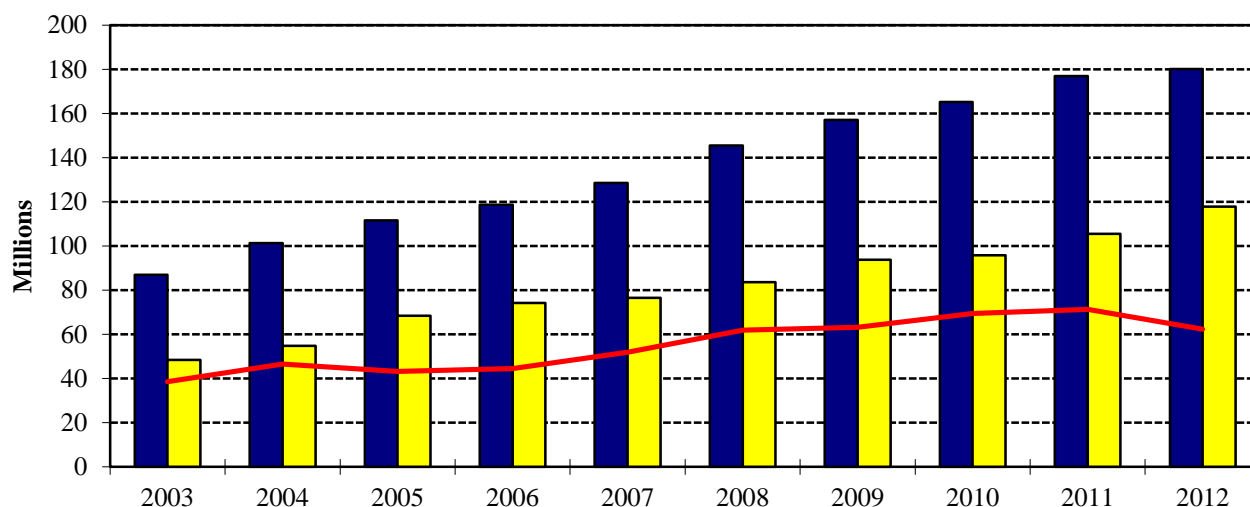
Historical Asset Yields



Frozen Unfunded Actuarial Accrued Liability

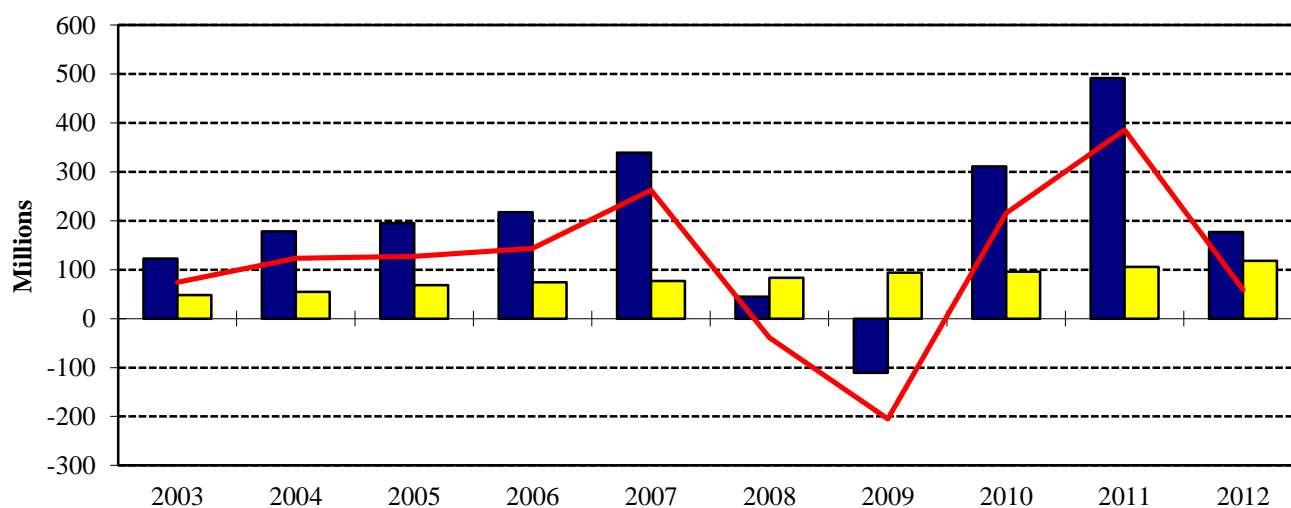


Net Non-Investment Income



		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Non-Investment Income (\$Mil)	■	87.0	101.4	111.7	118.7	128.6	145.7	157.1	165.3	177.0	180.2
Benefits and Expenses (\$Mil)	■	48.4	54.8	68.5	74.2	76.6	83.6	93.8	95.8	105.6	117.8
Net Non-Investment Income (\$Mil)	—	38.6	46.6	43.2	44.5	52.0	62.1	63.3	69.5	71.4	62.4

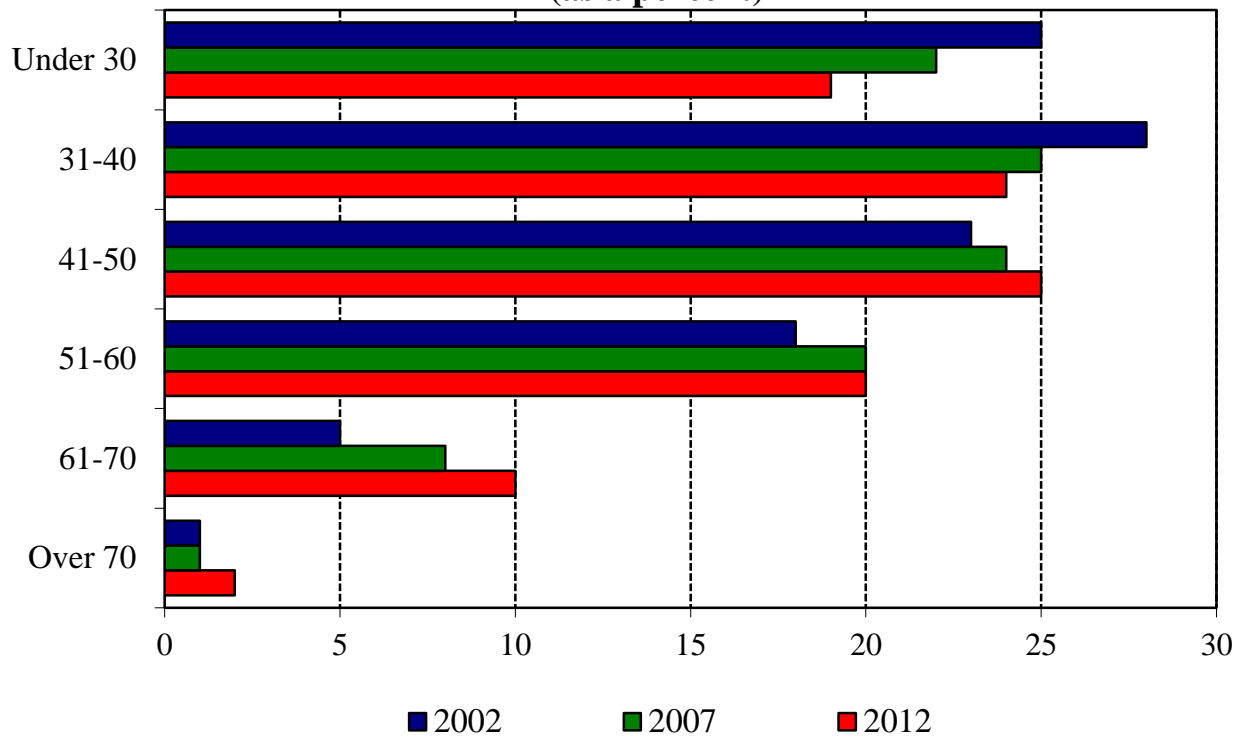
Total Income vs. Expenses



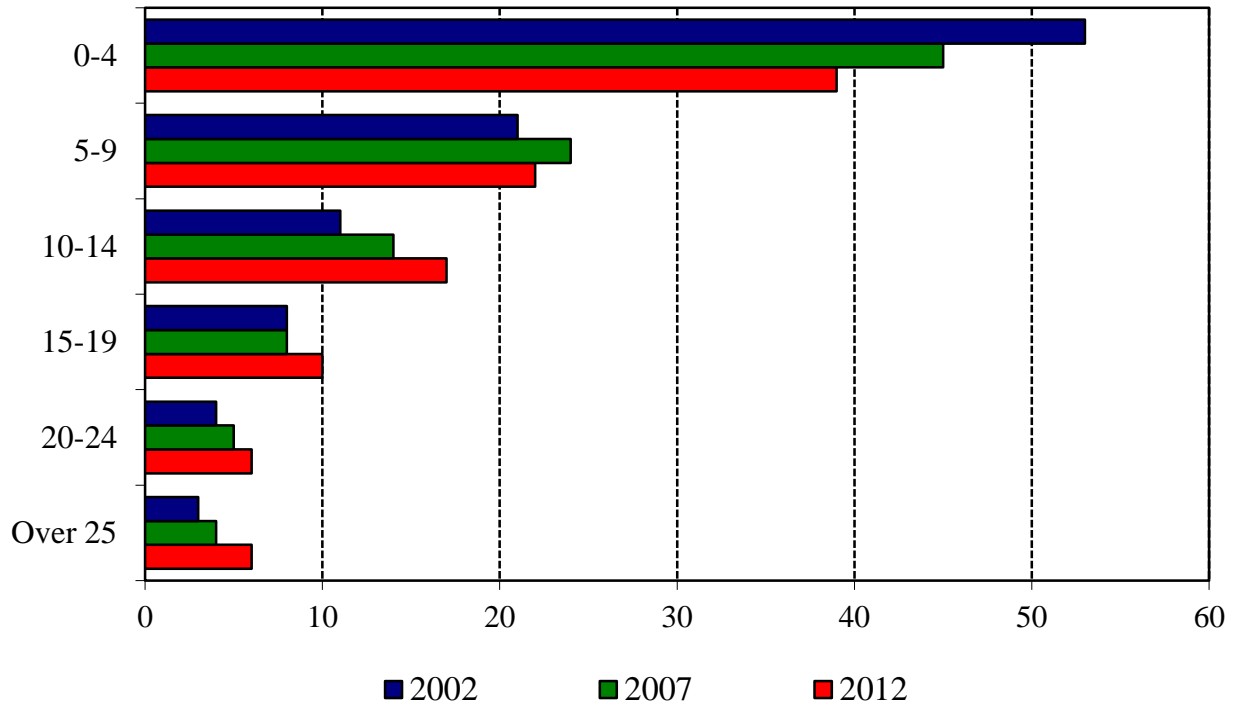
(Based on Market Value of Assets)

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Income (\$Mil)	■	122.4	178.4	195.5	217.5	339.3	44.6	-111.0	311.0	491.3	176.9
Benefits and Expenses (\$Mil)	■	48.4	54.8	68.5	74.2	76.6	83.6	93.8	95.8	105.6	117.8
Net Change in MVA (\$Mil)	—	74.0	123.6	127.0	143.3	262.7	-39.0	-204.8	215.2	385.7	59.1

Active – Census By Age (as a percent)



Active – Census By Service (as a percent)



EXHIBITS

EXHIBIT I

ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1. Present Value of Future Benefits.....	\$ 3,762,828,004
2. Present Value of Future Employee Contributions.....	\$ 570,327,767
3. Unfunded Actuarial Accrued Liability.....	\$ 66,156,793
4. Actuarial Value of Assets.....	\$ 2,042,809,526
5. Funding Deposit Account Credit Balance.....	\$ 6,448,956
6. Present Value of Future Employer Normal Costs (1 – 2 – 3 – 4 + 5).....	\$ 1,089,982,874
7. Present Value of Future Salaries.....	\$ 5,703,277,930
8. Employer Normal Cost Accrual Rate (6 ÷ 7).....	19.111516%
9. Projected Fiscal 2013 Salary for Current Membership.....	\$ 581,608,026
10. Employer Normal Cost as of July 1, 2012 (8 x 9).....	\$ 111,154,111
11. Amortization Payment on Frozen Unfunded Accrued Liability of \$ 66,156,793 with Payments increasing at 3.5% per year.....	\$ 7,784,452
12. Total Employer Normal Cost & Amortization Payment (10+ 11).....	\$ 118,938,563
13. Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment.....	\$ 123,547,343
14. Estimated Administrative Cost for Fiscal 2013.....	\$ 1,565,000
15. Gross Employer Actuarially Required Contribution for Fiscal 2013(13 + 14).....	\$ 125,112,343
16. Projected Income from Ad Valorem Taxes for Fiscal 2013.....	\$ 17,303,036
17. Projected Income from Revenue Sharing Funds for Fiscal 2013.....	\$ 423,104
18. GROSS Employer Actuarially Required Contribution to be funded by direct employer contributions and Insurance Premium Taxes for Fiscal 2013 (15 - 16 - 17).....	\$ 107,386,203
19. Estimated Insurance Premium Taxes due for fiscal 2013.....	\$ 15,794,377
20. Employer's Net Direct Actuarially Required Contribution (18 – 19).....	\$ 91,591,826
21. Projected Payroll (July 1, 2012 through June 30, 2013).....	\$ 629,483,050
22. Net Direct Employer Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2013 (20 ÷ 21).....	14.55%
23. Employer Contribution Rate for Fiscal 2013 (adjusted for FDA payment).....	13.75%
24. Contribution Shortfall (Excess) as a Percentage of Payroll (22 – 23).....	0.80%
25. Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess).....	0.08%
26. Recommended Net Direct Employer Contribution Rate for fiscal 2014 (Rounded to nearest 0.25%).....	14.75%

EXHIBIT II

PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits	\$ 2,504,869,235
Survivor Benefits	82,634,164
Disability Benefits	74,168,943
Vested Deferred Termination Benefits	71,785,365
Contribution Refunds	80,288,943

TOTAL Present Value of Future Benefits for Active Members \$ 2,813,746,650

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	\$ 40,491,937
Terminated Members with Reciprocals Due Benefits at Retirement ...	1,728,674
Terminated Members Due a Refund	16,966,930

TOTAL Present Value of Future Benefits for Terminated Members \$ 59,187,541

Present Value of Future Benefits for Pensioners:

Regular Retirees

Maximum	\$ 210,065,319
Option 1	80,466,882
Option 2	130,017,799
Option 2a	175,252,728
Option 3	36,887,597
Option 3a	77,328,755
Option 4	998,091
Option 5	40,577,852

TOTAL Regular Retirees \$ 751,595,023

Disability Retirees 27,514,826

Survivors & Widows 96,068,675

Annuities Certain Payable to Retirees 5,983,640

DROP and Back-DROP Account Balances 8,731,649

TOTAL Present Value of Future Benefits for Pensioners \$ 889,893,813

TOTAL Present Value of Future Benefits \$ 3,762,828,004

EXHIBIT III – Schedule A **MARKET VALUE OF ASSETS**

Current Assets:

Cash in Banks	\$ 12,056,768
Contributions Receivable from Members.....	4,092,724
Contributions Receivable from Employers	5,128,294
Accrued Interest and Dividends on Investments	4,206,132
Sold Investment Receivables.....	94,996,376
Miscellaneous Receivables.....	1,060,631

TOTAL CURRENT ASSETS \$ 121,540,925

Property, Plant and Equipment (Net of accumulated depreciation)..... \$ 2,614,054

Investments:

Equities and Other Investments	\$ 1,276,663,594
Bonds	602,004,314
Cash Equivalents.....	115,784,308

TOTAL INVESTMENTS \$ 1,994,452,216

TOTAL ASSETS..... \$ 2,118,607,195

Current Liabilities:

Purchased Investments Payables	\$ 137,667,497
Refunds Payable	1,161,056
Accounts Payable	1,877,620
Accrued Leave Payables.....	75,998
Pensions Payable	143,893
Other Payables.....	10,398,795
Obligations Under Securities Lending Program.....	257,384

TOTAL CURRENT LIABILITIES..... \$ 151,582,243

NET MARKET VALUE OF ASSETS..... \$ 1,967,024,952

EXHIBIT III – Schedule B **ACTUARIAL VALUE OF ASSETS**

Excess (Shortfall) of invested income
for current and previous 4 years:

Fiscal year 2012	\$ (158,417,021)
Fiscal year 2011	189,806,398
Fiscal year 2010	38,459,312
Fiscal year 2009	(391,592,607)
Fiscal year 2008	(227,585,992)
Total for five years.....	\$ (549,329,910)

Deferral of excess (shortfall) of invested income:

Fiscal year 2012 (80%)	\$ (126,733,617)
Fiscal year 2011 (60%)	113,883,839
Fiscal year 2010 (40%)	15,383,725
Fiscal year 2009 (20%)	(78,318,521)
Fiscal year 2008 (0%)	<u>0</u>
Total deferred for current year.....	\$ (75,784,574)

Market value of plan net assets, end of year \$ 1,967,024,952

Preliminary actuarial value of plan assets, end of year \$ 2,042,809,526

Actuarial value of assets corridor

85% of market value, end of year.....	\$ 1,671,971,209
115% of market value, end of year.....	\$ 2,262,078,695

Final actuarial value of plan net assets, end of year \$ 2,042,809,526

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund.....	\$ 570,327,767
Employer Normal Contributions to the Pension Accumulation Fund	1,089,982,874
Employer Amortization Payments to the Pension Accumulation Fund.....	66,156,793
Funding Deposit Account Credit.....	(6,448,956)
 TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	 \$ 1,720,018,478

EXHIBIT V
CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability.....	\$ 68,826,417
 Interest on Frozen Unfunded Accrued Liability	 \$ 5,506,113
Normal Cost for Prior Year	106,947,304
Interest on the Normal Cost	8,555,784
Administrative Expense	1,513,707
Interest on Administrative Expenses	59,383
Credit to Funding Deposit Account	0
 TOTAL Increases to Frozen Unfunded Accrued Liability	 \$122,582,291
 Direct Employer Contributions	 \$ 79,296,735
Interest on Employer Contributions	3,110,849
Ad Valorem, Revenue Sharing, and Insurance Premium Taxes	32,679,642
Interest on Taxes	1,282,038
Contribution Shortfall	557,185
Withdraw From Funding Deposit Account	8,011,183
Interest on Withdrawal	314,283
 TOTAL Decreases to Frozen Unfunded Accrued Liability	 \$125,251,915
 Net Change in Frozen Unfunded Accrued Liability	 (2,669,624)
 CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	 \$ 66,156,793

EXHIBIT VI **ANALYSIS OF INCREASE IN ASSETS**

Actuarial Value of Assets (June 30, 2011)..... \$ 1,935,179,988

Income:

Member Contributions	\$ 63,346,835
Employer Contributions	79,296,735
Ad Valorem Taxes	16,626,832
Revenue Sharing Funds	424,604
Funds Transferred into the System.....	4,910,150
Other	120
State Insurance Premium Taxes	15,628,206

Total Contribution Income..... \$ 180,233,482

Interest Income	\$ 19,508,982
Dividend Income	11,524,279
Net Change in Fair Values of Investments.....	(26,958,570)
Investment Expense	(7,407,567)
Adjustment for prior period.....	0

Total Investment Income..... \$ (3,332,876)

TOTAL Income..... \$ 176,900,606

Expenses:

Retirement Benefits	\$ 98,839,632
Refunds of Contributions	16,630,844
Administrative Expenses & Depreciation	1,513,707
Funds Transferred To Another System	837,923

TOTAL Expenses..... \$ 117,822,106

Net Market Income for Fiscal 2012 (Income - Expenses) \$ 59,078,500

Adjustment for Actuarial Smoothing \$ 48,551,038

Actuarial Value of Assets (June 30, 2012)..... \$ 2,042,809,526

EXHIBIT VII FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund.....	\$ 480,276,224
Annuity Reserve Fund.....	881,162,164
Pension Accumulation Fund	590,009,940
DROP and Back-DROP Accounts	9,127,668
Funding Deposit Account	6,448,956
 MARKET VALUE OF ASSETS.....	 \$ 1,967,024,952
ADJUSTMENT FOR ACTUARIAL SMOOTHING	75,784,574
ACTUARIAL VALUE OF ASSETS	\$ 2,042,809,526

EXHIBIT VIII PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 1,590,458,739
Present Value of Benefits Payable to Terminated Employees	59,187,541
Present Value of Benefits Payable to Current Retirees and Beneficiaries	889,893,813
 TOTAL PENSION BENEFIT OBLIGATION	 2,539,540,093
ACTUARIAL VALUE OF ASSETS	2,042,809,526
 Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	 80.44%

EXHIBIT IX **COST OF LIVING ADJUSTMENTS - TARGET RATIO**

Actuarial Value of Assets Divided by PBO as of Fiscal 1986:..... 51.50%

Amortization of Unfunded Balance over 30 years:..... 42.03%

Adjustments in Funded Ratio Due to Mergers or Changes in Assumption(s):

Changes for Fiscal 1988	9.71%
Changes for Fiscal 1994	(2.60%)
Changes for Fiscal 1996	2.93%
Changes for Fiscal 1997	(3.69%)
Changes for Fiscal 1998	(3.72%)
Changes for Fiscal 2000	0.13%
Changes for Fiscal 2001	(2.09%)
Changes for Fiscal 2003	1.34%
Changes for Fiscal 2005	(0.19%)
Changes for Fiscal 2006	5.34%
Changes for Fiscal 2009	8.49%
Changes for Fiscal 2010	(2.27%)
Changes for Fiscal 2012	(0.80%)

TOTAL Adjustments..... 12.58%

Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988	(7.77%)
Changes for Fiscal 1994	1.56%
Changes for Fiscal 1996	(1.56%)
Changes for Fiscal 1997	1.85%
Changes for Fiscal 1998	1.74%
Changes for Fiscal 2000	(0.05%)
Changes for Fiscal 2001	0.77%
Changes for Fiscal 2003	(0.40%)
Changes for Fiscal 2005	0.04%
Changes for Fiscal 2006	(1.07%)
Changes for Fiscal 2009	(0.85%)
Changes for Fiscal 2010	0.15%
Changes for Fiscal 2012	0.00%

TOTAL Amortization of Adjustments..... (5.59%)

Target Ratio for Current Fiscal Year (Limited to 100%)..... 100.00%

Actuarial Value of Assets Divided by PBO as of Fiscal 2012..... 80.44%

**EXHIBIT X
CENSUS DATA**

	Active	Terminated with Funds on Deposit	Retired	Total
Number of members as of June 30, 2011	14,754	5,066	3,716	23,536
Additions to Census				
Initial membership	1,315	175		1,490
Death of another member			57	57
Omitted in error last year			4	4
Change in Status during Year				
Actives terminating service	(582)	582		
Actives who retired	(255)		255	
Suspended Benefits Reinstated				
Term. members rehired	76	(76)		
Term. members who retire		(26)	26	
Retirees who are rehired	1		(1)	
Refunded who are rehired	55	14		69
DROP participants retiring				
DROP returned to work				
Omitted in error last year				
Eliminated from Census				
Refund of contributions	(1095)	(302)		(1,397)
Deaths	(38)	(27)	(128)	(193)
Included in error last year				
Adjustment for multiple records			(7)	(7)
Number of members as of June 30, 2012	14,231	5,406	3,922	23,559

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	53	25	78	26,072	2,033,590
21 - 25	655	276	931	31,998	29,789,960
26 - 30	1,171	563	1,734	37,909	65,733,499
31 - 35	1,119	627	1,746	41,177	71,894,388
36 - 40	1,104	562	1,666	43,962	73,241,470
41 - 45	1,227	627	1,854	46,008	85,299,509
46 - 50	1,102	658	1,760	47,347	83,331,080
51 - 55	935	654	1,589	46,888	74,505,526
56 - 60	772	497	1,269	45,726	58,026,419
61 - 65	642	280	922	44,317	40,860,704
66 - 70	301	114	415	40,834	16,946,197
71 - 75	145	45	190	35,959	6,832,303
76 - 80	53	10	63	34,989	2,204,291
81 - 85	10	0	10	27,600	275,999
86 - 90	2	1	3	41,500	124,500
91 - 95	1	0	1	40,446	40,446
TOTAL	9,292	4,939	14,231	42,944	611,139,881

THE ACTIVE CENSUS INCLUDES 4,480 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 DROP PARTICIPANTS AND 6 ACTIVE FORMER DROP PARTICIPANTS.

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	4	2	6	16,453	98,716
36 - 40	20	4	24	23,791	570,975
41 - 45	55	18	73	20,246	1,477,994
46 - 50	99	26	125	20,290	2,536,298
51 - 55	70	24	94	18,170	1,707,969
56 - 60	9	3	12	11,723	140,671
61 - 65	5	3	8	6,900	55,200
66 - 70	2	1	3	7,427	22,282
71 - 75	2	0	2	4,698	9,395
76 - 80	1	0	1	1,881	1,881
81 - 85	1	0	1	2,081	2,081
91 - 99	1	0	1	399	399
TOTAL	269	81	350	18,925	6,623,861

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging		Number	Total Contributions
From	To		
0	- 99	1,267	53,047
100	- 499	1,400	356,479
500	- 999	566	410,836
1000	- 1999	458	664,176
2000	- 4999	497	1,611,272
5000	- 9999	338	2,423,237
10000	- 19999	315	4,490,473
20000	- 119999	215	6,260,444
TOTAL		5,056	16,269,964

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	4	3	7	35,299	247,095
51 - 55	54	35	89	38,145	3,394,912
56 - 60	322	156	478	33,110	15,826,595
61 - 65	461	207	668	29,216	19,515,976
66 - 70	513	184	697	24,190	16,860,099
71 - 75	365	120	485	21,481	10,418,384
76 - 80	229	86	315	17,812	5,610,697
81 - 85	127	41	168	19,135	3,214,753
86 - 90	43	27	70	19,670	1,376,921
91 - 99	6	7	13	15,461	200,989
TOTAL	2,124	866	2,990	25,641	76,666,421

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	0	1	1	9,977	9,977
31 - 35	1	2	3	11,138	33,413
36 - 40	1	2	3	17,932	53,797
41 - 45	12	4	16	14,012	224,195
46 - 50	11	8	19	16,762	318,474
51 - 55	25	12	37	21,868	809,117
56 - 60	20	13	33	15,147	499,862
61 - 65	25	6	31	12,360	383,162
66 - 70	17	3	20	12,906	258,123
71 - 75	12	3	15	10,227	153,400
76 - 80	4	2	6	14,005	84,032
81 - 85	6	1	7	10,066	70,460
86 - 90	1	0	1	14,020	14,020
TOTAL	135	57	192	15,167	2,912,032

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	12	27	39	5,829	227,328
26 - 30	0	2	2	6,009	12,017
31 - 35	0	5	5	16,893	84,465
36 - 40	2	8	10	17,679	176,794
41 - 45	1	9	10	15,672	156,723
46 - 50	3	20	23	17,945	412,745
51 - 55	2	31	33	15,797	521,309
56 - 60	1	59	60	20,034	1,202,056
61 - 65	4	76	80	19,632	1,570,563
66 - 70	7	96	103	16,691	1,719,146
71 - 75	4	103	107	14,664	1,569,087
76 - 80	3	90	93	14,238	1,324,120
81 - 85	2	84	86	15,834	1,361,727
86 - 90	2	61	63	11,011	693,709
91 - 99	1	25	26	10,928	284,131
TOTAL	44	696	740	15,292	11,315,920

ACTIVE MEMBERS:

Completed Years of Service

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20	70	8										78
21 - 25	351	193	171	113	65	38						931
26 - 30	277	211	228	242	233	520	23					1,734
31 - 35	171	132	137	160	164	628	335	19				1,746
36 - 40	114	100	119	123	98	387	464	250	11			1,666
41 - 45	104	92	106	118	103	365	370	372	215	9		1,854
46 - 50	92	74	92	97	110	326	283	243	258	169	16	1,760
51 - 55	88	64	75	84	79	272	270	195	183	178	101	1,589
56 - 60	65	63	63	61	70	239	256	156	108	99	89	1,269
61 - 65	38	43	39	56	59	240	186	111	59	50	41	922
66 - 70	20	21	13	26	18	84	112	53	29	22	17	415
71 & Over	6	12	9	22	13	72	59	37	14	12	11	267
Totals	1396	1013	1052	1102	1012	3171	2358	1436	877	539	275	14231

AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Completed Years of Service

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Salary
0 - 20	26,057	26,196										26,072
21 - 25	27,750	31,438	33,876	36,340	39,292	40,240						31,998
26 - 30	29,287	34,133	36,854	38,889	40,447	42,522	46,501					37,909
31 - 35	30,357	34,210	36,875	37,465	40,677	43,805	47,448	56,074				41,177
36 - 40	30,488	32,125	35,070	37,978	39,868	43,575	49,272	54,263	46,404			43,962
41 - 45	30,430	30,856	36,356	38,218	38,719	42,293	48,721	54,932	58,246	58,153		46,008
46 - 50	30,066	32,273	34,317	37,243	37,508	43,321	47,694	53,124	59,117	62,493	58,642	47,347
51 - 55	28,687	31,023	32,097	37,490	34,674	38,946	45,039	49,427	57,425	64,129	73,106	46,888
56 - 60	31,486	29,862	29,812	39,691	40,140	38,951	43,849	50,230	54,587	61,072	75,028	45,726
61 - 65	31,007	27,623	28,223	33,301	36,041	39,530	46,693	48,130	58,723	58,787	84,979	44,317
66 - 70	28,941	24,834	22,812	35,211	31,519	35,021	41,551	45,491	53,251	61,487	68,409	40,834
71 & Over	26,665	26,559	23,558	28,193	29,201	28,676	38,105	43,009	49,860	47,193	56,224	35,496
Average	29,199	31,914	34,531	37,456	38,827	41,618	46,787	52,085	57,465	61,974	73,691	42,944

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35									6			6
36 - 40								24				24
41 - 45							71	2				73
46 - 50						123	2					125
51 - 55	10	16	23	20	18	7						94
56 - 60	9		2	1								12
61 - 65	8											8
66 - 70	3											3
71 - 75	2											2
76 - 80	1											1
81 - 85	1											1
86 - 90												0
91 & Over	1											1
Totals	35	16	25	21	18	130	73	26	6	0	0	350

AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35									16,453			16,453
36 - 40								23,791				23,791
41 - 45							20,688	4,576				20,246
46 - 50						20,581	2,392					20,290
51 - 55	18,103	20,771	18,005	19,092	20,090	5,290						18,170
56 - 60	13,449		9,569	494								11,723
61 - 65	6,900											6,900
66 - 70	7,427											7,427
71 - 75	4,698											4,698
76 - 80	1,881											1,881
81 - 85	2,081											2,081
86 - 90												0
91 & Over	399											399
Average	11,238	20,771	17,330	18,206	20,090	19,758	20,187	22,313	16,453	0	0	18,925

SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 50	4	2				1						7
51 - 55	33	20	13	8	10	5						89
56 - 60	91	86	70	89	38	100	4					478
61 - 65	63	72	43	62	51	319	57	1				668
66 - 70	48	46	37	61	48	274	153	30				697
71 - 75	21	15	14	23	20	137	146	88	20	1		485
76 - 80	12	6	7	7	2	44	77	78	59	22	1	315
81 - 85	1	4	3	1	2	13	17	50	28	38	11	168
86 - 90				1		3	2	8	17	23	16	70
91 & Over									1	4	8	13
Totals	273	251	187	252	171	896	456	255	125	88	36	2990

AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 50	37,054	44,028				10,823						35,299
51 - 55	37,548	39,920	35,861	31,115	41,531	45,401						38,145
56 - 60	33,701	35,949	30,977	33,127	29,433	33,779	13,788					33,110
61 - 65	29,882	30,509	28,465	31,700	28,404	29,354	24,902	15,294				29,216
66 - 70	26,241	25,883	32,152	24,906	23,288	25,608	19,780	18,009				24,190
71 - 75	15,085	22,815	28,328	23,146	26,142	25,001	20,092	17,737	18,593	16,172		21,481
76 - 80	20,532	15,870	18,153	19,212	7,413	25,355	18,690	17,273	13,093	13,892	12,507	17,812
81 - 85	6,489	12,461	7,764	13,102	41,403	16,115	33,228	20,003	18,374	15,434	14,889	19,135
86 - 90				6,448		21,888	7,287	28,054	22,068	20,398	13,843	19,670
91 & Over									10,336	21,951	12,856	15,461
Average	29,912	31,285	29,920	29,239	27,606	27,692	20,730	18,385	16,355	16,651	13,906	25,641

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30				1								1
31 - 35			2		1							3
36 - 40	1			1								3
41 - 45	2	1	3		3	6	3	1				16
46 - 50	2	2		5		3	4					19
51 - 55	4	1	4	5	2	8	7	4				37
56 - 60		5	1	2	3	6	6	3	2	2	1	33
61 - 65			1	1	1	4	9	9	4	1	1	31
66 - 70	1		1	2	1	2	1	6	5	1	1	20
71 - 75			1	1		2		3	6	1	1	15
76 - 80									1	2	3	6
81 - 85						1			1	1	5	7
86 - 90									1			1
91 & Over												0
Totals	10	9	12	18	11	33	30	26	23	8	12	192

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30				9,977	11,462							9,977
31 - 35			10,976	12,696		18,221						11,138
36 - 40	22,880		16,953			12,200	10,018	7,239				17,932
41 - 45	21,407	20,025		17,111	27,298	15,519	10,358					14,012
46 - 50	15,767	15,752		35,641	26,208	21,474	16,072	12,179	9,751			16,762
51 - 55	19,740	18,801	32,056	11,074	12,545	26,950	18,678	7,628	11,017	11,667	13,770	21,868
56 - 60		10,058	11,960	20,496	13,603	14,055	13,009	10,471	10,708	13,635	8,799	15,147
61 - 65			16,262	14,931	11,157	12,782	5,483	15,326	12,670	5,771	9,787	12,906
66 - 70	15,193		7,511	4,783		8,431		7,270	12,550	12,593	14,543	10,227
71 - 75									16,852	14,403	12,791	14,005
76 - 80						6,063				9,287	11,022	10,066
81 - 85									14,020			14,020
86 - 90												0
91 & Over												
Average	19,138	13,402	19,731	20,207	18,924	17,460	13,954	11,032	11,997	11,678	11,698	15,167

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 20		2	6	4	3	11	4					30
21 - 25			1			5	3					9
26 - 30					1		1					2
31 - 35			1		1	2	1					5
36 - 40	1			2		6	1					10
41 - 45	2		1			3	2	1			1	10
46 - 50	1	2	2	1	1	8	4	3				23
51 - 55	5	2	3	3	1	6	8	4	1			33
56 - 60	9	7	1	6	4	14	6	6			1	60
61 - 65	7	4	7	6	7	17	13	10	4		1	80
66 - 70	12	7	8	8	8	24	21	12	1			103
71 - 75	8	9	9	9	2	31	15	14	5		3	107
76 - 80	7	3	2	6	5	24	15	15	6		2	93
81 - 85	4	4	3	8		12	16	13	12	7		86
86 - 90	1		1	1	1	7	14	8	10	8		63
91 & Over			1		1	2	4	4	4	2	8	26
Totals	57	40	46	54	35	172	128	90	47	36	35	740

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 20		5,176	7,011	4,440	6,931	5,465	7,382					6,020
21 - 25			9,556			4,194	5,397					5,191
26 - 30					7,621		4,396					6,009
31 - 35			22,069		25,196	13,432	10,336					16,893
36 - 40	15,117			14,571		20,624	8,792					17,679
41 - 45	18,972		39,492			13,927	9,166	14,127			5,044	15,672
46 - 50	28,595		27,891	34,023		14,403	11,848	12,384	6,520			17,945
51 - 55	12,728	25,699	19,806	24,608	15,507	19,681	10,603	10,855	12,641			15,797
56 - 60	28,970	17,299	50,260	21,318	16,148	20,621	19,111	14,751	13,828			20,034
61 - 65	35,924	11,572	15,524	30,174	13,089	24,772	17,538	13,572	16,306	13,111	4,798	19,632
66 - 70	22,841	14,992	15,774	12,516	22,798	15,570	15,315	16,876	7,286	9,158	4,777	16,691
71 - 75	12,162	14,622	12,348	23,817	8,298	15,678	14,455	14,189	8,148	15,739	8,133	14,664
76 - 80	11,524	20,002	7,587	11,657	26,182	17,299	10,686	11,703	14,624	13,548	10,137	14,238
81 - 85	7,433	20,749	22,575	16,982	5,576	13,914	19,094	14,742	17,102	14,537	10,615	15,834
86 - 90	3,482		14,634	6,654	10,345	10,478	11,800	10,809	12,089	13,932	8,832	11,011
91 & Over			12,427		17,366	6,603	14,502	16,864	10,308	12,804	6,981	10,928
Average	20,049	16,465	15,970	18,345	17,366	15,959	13,983	13,791	13,383	13,361	8,441	15,292

EXHIBIT XI

YEAR -TO-YEAR COMPARISON

	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009
Number of Active Members	14,231	14,754	14,711	14,396
Number of Retirees and Survivors	3,922	3,716	3,510	3,369
Number Terminated Due Deferred Benefits	350	323	325	306
Number Terminated Due Refund	5,056	4,743	4,727	4,435
Active Lives Payroll	\$ 611,139,881	\$ 623,084,570	\$ 603,250,449	\$ 577,078,980
Retiree Benefits in Payment	\$ 90,894,373	\$ 83,741,250	\$ 76,379,208	\$ 71,517,150
Market Value of Assets	\$1,967,024,952	\$1,907,946,452	\$1,522,233,162	\$1,306,974,663
Ratio of AVA to GASB-25 Accrued Liability	96.86%	96.57%	96.15%	95.67%
Accrued Liability (as Defined by GASB-25)	\$2,108,966,319	\$2,004,006,405	\$1,844,493,001	\$1,681,075,062
Actuarial Value of Assets	\$2,042,809,526	\$1,935,179,988	\$1,773,450,705	\$1,608,228,363
Frozen Unfunded Actuarial Accrued Liability	\$ 66,156,793	\$ 68,826,417	\$ 71,042,296	\$ 72,846,699
Present Value of Future Employer Normal Cost	\$1,089,982,874	\$1,044,434,589	\$1,003,967,230	\$ 890,632,040
Present Value of Future Employee Contributions	\$ 570,327,767	\$ 578,341,253	\$ 557,530,584	\$ 517,818,601
Funding Deposit Account (FDA)	\$ 6,448,956	\$ 13,680,020	\$ 17,151,710	\$ 15,881,213
Present Value of Future Benefits	\$3,762,828,004	\$3,613,102,227	\$3,388,839,105	\$3,073,644,490

	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010
Employee Contribution Rate	10.00%	10.00%	10.00%	10.00%
Projected Ad Valorem and Revenue Sharing Funds as a % of Projected Payroll	2.82%	2.56%	2.61%	2.75%
Estimated Insurance Premium Taxes as a % of Projected Payroll	2.51%	2.44%	2.48%	2.55%
Actuarially Required Net Direct Employer Contributions as a % of Projected Payroll	14.55%	13.78%	13.56%	12.58%
Actual Net Direct Employer Contribution Rate	13.75% *	13.75% ‡	12.75% †	11.00%

† 12.00% paid directly by employers with additional 0.75% allocated from the Funding Deposit Account

‡ 12.50% paid directly by employers with additional 1.25% allocated from the Funding Deposit Account

* 13.25% paid directly by employers with additional 0.50% allocated from the Funding Deposit Account

Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003
14,038	13,530	12,835	13,863	13,657	13,595
3,140	2,995	2,859	2,693	2,488	2,325
328	340	329	279	299	280
4,156	3,939	3,722	3,152	2,977	2,793
\$ 537,082,456	\$ 481,418,484	\$ 436,370,158	\$ 432,019,757	\$ 406,020,215	\$ 383,388,474
\$ 64,309,775	\$ 55,471,909	\$ 50,612,587	\$ 45,968,384	\$ 39,124,305	\$ 35,381,798
\$1,511,820,016	\$1,550,829,081	\$1,288,100,175	\$1,144,751,928	\$1,017,722,292	\$ 894,112,820
95.64%	93.85%	93.07%	91.99%	91.30%	90.76%
\$1,702,582,378	\$1,564,897,616	\$1,378,133,705	\$1,180,095,189	\$1,075,107,796	\$ 999,746,836
\$1,628,303,910	\$1,468,646,528	\$1,282,638,484	\$1,085,515,384	\$ 981,583,851	\$ 907,401,749
\$ 74,278,468	\$ 96,251,088	\$ 95,495,221	\$ 94,579,805	\$ 93,523,945	\$ 92,345,087
\$ 641,924,601	\$ 524,216,581	\$ 527,090,828	\$ 598,357,461	\$ 503,285,937	\$ 435,520,804
\$ 482,053,768	\$ 436,275,292	\$ 400,515,989	\$ 399,070,734	\$ 344,408,426	\$ 319,054,283
\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$2,826,560,747	\$2,525,389,489	\$2,305,740,522	\$2,177,523,384	\$1,922,802,159	\$1,754,321,923

Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004
10.00%	10.00%	10.00%	10.00%	10.00%/9.80% *	9.80%
2.53%	2.39%	2.47%	2.32%	2.44%	2.45%
2.72%	2.87%	2.77%	2.68%	2.78%	2.58%
8.92%	7.59%	8.69%	10.99%	10.62%	9.61%
11.00%	11.00%	11.00%	10.75%	9.75%	9.25%

* Increase effective October 1, 2004

SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Sheriffs' Pension & Relief Fund is a defined benefit pension plan that provides retirement allowances and other benefits. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP - Any sheriff elected or deputy employed, who is otherwise eligible for membership must become a participating member of the fund. All salaried employees of the Sheriffs' Pension and Relief Fund and the Louisiana Sheriffs' Association who meet certain requirements are also eligible to become members of the retirement system.

CONTRIBUTION RATES - The fund is financed by a combination of employee contributions, employer contributions, dedicated ad valorem taxes, revenue sharing funds, and insurance premium taxes. The employee contribution rate is determined by the Board of Trustees but cannot be less than 9.8% nor more than 10.25%. Gross employer contributions are determined by actuarial valuation and are subject to change each year in accordance with R. S. 11:103 and R. S. 11:105. Also, the fund annually receives revenue sharing funds and ad valorem taxes equal to 0.5% of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, and additional funds as indicated by valuation and apportioned by the Public Employees' Retirement Systems' Actuarial Committee from available insurance premium taxes described in R. S. 22:1476A(3).

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance who have remained out of service for a period of thirty days are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued benefits in the system.

NORMAL RETIREMENT BENEFITS - For members whose first employment making them eligible for membership in the system began on or before December 31, 2011: Members with twelve years of creditable service may retire at age fifty-five; members with thirty years of creditable service may retire at any age. The retirement allowance is equal to three and one-third percent of the member's average final compensation multiplied by his years of creditable service, not to exceed (after reduction for optional payment form) 100% of average final compensation.

For members whose first employment making them eligible for membership in the system began on or after January 1, 2012: Members with twelve years of creditable service may retire at age sixty-two; members with twenty years of service may retire at age sixty; members with thirty years of creditable service may retire at age fifty-five. The benefit accrual rate for such members with less than thirty years of service is three percent; for members with thirty or more years of service, the accrual rate is three and one-third percent. The retirement allowance is equal to the benefit accrual rate times the member's average final compensation multiplied by his years of creditable service, not to exceed (after reduction for optional payment form) 100% of average final compensation.

EARLY RETIREMENT BENEFITS - For members whose first employment making them eligible for membership in the system began on or before December 31, 2011: Active, contributing members with at least ten years of creditable service may retire at age sixty. The accrued normal retirement benefit is reduced actuarially for each month or fraction thereof that retirement begins prior the member's earliest normal retirement date assuming continuous service.

For all members: Members with twenty or more years of service may retire with a reduced retirement at age fifty.

FINAL AVERAGE COMPENSATION – For a member whose first employment making him eligible for membership in the system began on or before June 30, 2006, final average compensation is based on the average monthly earnings during the highest thirty-six consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve month period within the thirty-six month period shall not exceed 125% of the preceding twelve month period.

For a member whose first employment making him eligible for membership in the system began after June 30, 2006, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted.

OPTIONAL ALLOWANCES - Members may receive their benefits as a life annuity, or in lieu of such receive a reduced benefit according to the option selected, which is the actuarial equivalent of the maximum benefit.

Option 1 - If the member dies before he has received in annuity payments the present value of his member's annuity as it was at the time of retirement, the balance is paid to his beneficiary.

Option 2 - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will continue to receive the same reduced benefit.

Option 2A - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will continue to receive the same reduced benefit. If the member's spouse dies before the member, the member's benefit will revert to the maximum.

Option 3 - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will receive one-half of the member's reduced benefit.

Option 3A - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will receive one-half of the member's reduced benefit. If the member's spouse dies before the member, the member's benefit will revert to the maximum.

Option 4 - Upon retirement, the member elects to receive a board-approved benefit that is actuarially equivalent to the maximum benefit.

Option 5 - Upon retirement, the member may receive ninety percent of the maximum benefit. Upon the member's death, if survived by a surviving spouse to whom the member was married and living with at the time of retirement, fifty percent of the member's benefit shall be paid to the spouse during said spouse's lifetime.

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2½% annual compound increase in monthly retirement benefits based on the reduced benefit and commencing on the later of age fifty-five or retirement anniversary; this COLA is in addition to any ad hoc COLAs which are payable. Back-DROP participants are not eligible for this benefit.

DISABILITY BENEFITS - Ten years of creditable service are required in order to be eligible for disability benefits when a non-service related disability is incurred; there are no service requirements for a service related disability. Totally disabled members receive the lesser of their accrued retirement benefit (with a minimum of 45%) or their accrued retirement benefit assuming continued service to their earliest normal retirement age. Members who become partially disabled receive 75% of the amount payable for total disability.

SURVIVOR BENEFITS - Survivor benefits for death solely as a result of injuries received in the line of duty are based on the following. For a spouse alone, a sum equal to 50% of the member's final average compensation with a minimum of \$150 per month. If a spouse is entitled to benefits and has a child or children under eighteen years of age (or over said age if physically or mentally incapacitated and dependent upon the member at the time of his death), an additional sum of 15% of the member's final average compensation is paid to each child with total benefits paid to spouse and children not to exceed 100%. If a member dies with no surviving spouse, surviving children under age eighteen receive monthly benefits of 15% of the member's final average compensation up to a maximum of 60% of final average compensation if there are more than four children. If a member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option 2 benefit; the additional benefit payable to children is the same as those available for members who die in the line of duty. In lieu of receiving option 2 benefits, the surviving spouse may receive a refund of the member's accumulated contributions. Benefits payable to surviving children are extended through age twenty-two, if the child is a full time student in good standing enrolled at a board approved or accredited school, college, or university.

Back-DROP – In lieu of receiving a service retirement allowance any member of the fund who has more than sufficient service for a regular service retirement may elect to receive a “Back-DROP” benefit. The Back-DROP benefit is based upon the Back-DROP period selected and the final average compensation prior to the period selected. The Back-DROP period is the lesser of three years or the service accrued between the time a member first becomes eligible for retirement and his actual date of retirement. Members who have thirty or more years of service may elect a Back-DROP period not to exceed the lesser of forty-eight months or the number of months of creditable service accrued after the member first became eligible for regular retirement. At retirement the member's maximum monthly retirement benefit is based upon his service, final average compensation, and plan provisions in effect on the last day of creditable service immediately prior to the commencement of the Back-DROP period. In addition to the monthly benefit at retirement, the member receives a lump-sum payment equal to the maximum monthly benefit as calculated above multiplied by the number of months in the Back-DROP period. In addition, the member's Back-DROP account is credited with employee contributions received by the retirement fund during the Back-DROP period. Any DROP or Back-DROP balances left on deposit are managed by a third party, fixed income investment manager. Participants have the option to opt out of this program and take a distribution, if eligible, or to rollover the assets to another qualified plan.

COST OF LIVING INCREASES - The board of trustees is authorized to grant retired members and widows of members who have retired an annual cost of living increase of between 2% and 3% of their current benefit, (not less than twenty dollars per month). When such a cost of living increase is granted in any fiscal year, no such cost-of-living increase may be granted in the immediately following fiscal year. Members retiring on or after July 1, 2007, who have not attained the age of sixty years, may not receive this cost-of-living increase until they have been retired for three years. Those who have attained the age of sixty years may not receive this cost-of-living increase until they have been retired for one year. Different waiting periods applied to retirements prior to July 1, 2007. In addition, the board may grant retired members and widows who are sixty-five years of age and older a 2% increase in their original benefit (or the benefit being received on October 1, 1977 if retirement had commenced prior to that date). In order for the board to grant either of these increases the system must meet certain criteria in the statutes related to funding status and interest earnings. In lieu of these cost of living adjustments the board may also grant an increase in the form of " $X \times (A+B)$ " where "X" is any amount up to \$1 per month and "A" is equal to the number of years of credited service accrued at retirement or at death of the member or retiree, and "B" is equal to the number of years since retirement or since death of the member or retiree to June thirtieth of the initial year of such increase. The board may only grant such COLA's in years in which the fund meets certain funding and investment earnings targets.

ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors that have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The following chart illustrates the effect of emerging experience on the plan.

Factor	Increase in Factor Results in
Investment Earnings Rate	Decrease in Cost
Annual Rate of Salary Increase	Increase in Cost
Rates of Retirement	Increase in Cost
Rates of Termination	Decrease in Cost
Rates of Disability	Increase in Cost
Rates of Mortality	Decrease in Cost
ACTUARIAL COST METHOD:	Frozen Attained Age Normal actuarial cost method with allocation based on earnings. The frozen actuarial accrued liabilities were calculated on the projected unit credit cost method.
VALUATION INTEREST RATE:	7.9%
ACTUARIAL ASSET VALUES:	Invested assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.
ANNUAL SALARY INCREASE RATE:	6% (3.25% Inflation; 2.75% Merit)
ACTIVE MEMBER MORTALITY:	RP 2000 Employee Table set back 1 year for males and females
ANNUITANT AND BENEFICIARY MORTALITY	RP 2000 Healthy Annuitant Table set back 1 year for males and females

Back-DROP: Members eligible for Back-DROP are assumed to elect benefits which have a present value of ½% less than the maximum possible present value based on a comparison to available back DROP benefits and regular retirement benefits.

RETIREE COST OF LIVING INCREASES: The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

RATES OF RETIREMENT: The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Retirement rates for members who have completed DROP participation and are currently active are 0.3.

RETIREMENT LIMITATIONS: Projected retirement benefits are not subjected to IRS Section 415 limits.

RATES OF WITHDRAWAL: The rates of withdrawal are applied based upon completed years of service according to the following table:

Service	Factor	Service	Factor
<1	0.260	15	0.025
1	0.170	16	0.025
2	0.130	17	0.025
3	0.120	18	0.025
4	0.100	19	0.015
5	0.080	20	0.015
6	0.070	21	0.015
7	0.070	22	0.015
8	0.060	23	0.015
9	0.040	24	0.015
10	0.040	25	0.015
11	0.040	26	0.015
12	0.040	27	0.015
13	0.025	28	0.015
14	0.025	29	0.015

Note: The withdrawal rate for individuals eligible to retire is assumed to be zero.

MARRIAGE STATISTICS: 85% of the members are assumed to be married; husbands are assumed to be three years older than wives.

FAMILY STATISTICS: Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2000 U. S. Census:

<u>Member's Age</u>	<u>% With Children</u>	<u>Number of Children</u>	<u>Average Age</u>
25	62%	1.7	6
35	82%	2.1	10
45	66%	1.8	13
55	19%	1.4	15
65	2%	1.4	15

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables for Males and Females

SERVICE RELATED DEATHS: 15% of total deaths

RATES OF DISABILITY: 15% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

PARTIAL DISABILITIES: 20% of Total Disabilities

SERVICE RELATED DISABILITIES: 20% of Total Disabilities

VESTING ELECTING PERCENTAGE: 60% of those members under age 50 who are terminated vested elect deferred benefits in lieu of contribution refunds. 80% of those who are at least age 50 who are terminated vested elect deferred benefits in lieu of contribution refunds.

ACTUARIAL TABLES AND RATES

Age	Male Employee Mortality	Female Employee Mortality	Male Retiree Mortality	Female Retiree Mortality	Retirement Rates	Disability Rates
18	0.00030	0.00018	0.00030	0.00018	0.00000	0.00023
19	0.00032	0.00019	0.00032	0.00019	0.00000	0.00023
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00023
21	0.00035	0.00019	0.00035	0.00019	0.00000	0.00023
22	0.00036	0.00019	0.00036	0.00019	0.00000	0.00023
23	0.00037	0.00019	0.00037	0.00019	0.00000	0.00023
24	0.00037	0.00020	0.00037	0.00020	0.00000	0.00023
25	0.00038	0.00020	0.00038	0.00020	0.00000	0.00023
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00023
27	0.00038	0.00021	0.00038	0.00021	0.00000	0.00023
28	0.00038	0.00022	0.00038	0.00022	0.00000	0.00023
29	0.00039	0.00024	0.00039	0.00024	0.00000	0.00023
30	0.00041	0.00025	0.00041	0.00025	0.00000	0.00023
31	0.00044	0.00026	0.00044	0.00026	0.00000	0.00023
32	0.00050	0.00031	0.00050	0.00031	0.00000	0.00023
33	0.00056	0.00035	0.00056	0.00035	0.00000	0.00023
34	0.00063	0.00039	0.00063	0.00039	0.00000	0.00023
35	0.00070	0.00044	0.00070	0.00044	0.00000	0.00025
36	0.00077	0.00047	0.00077	0.00047	0.00000	0.00029
37	0.00084	0.00051	0.00084	0.00051	0.00000	0.00031
38	0.00090	0.00055	0.00090	0.00055	0.00000	0.00036
39	0.00096	0.00060	0.00096	0.00060	0.00000	0.00041
40	0.00102	0.00065	0.00102	0.00065	0.00000	0.00047
41	0.00108	0.00071	0.00108	0.00071	0.00000	0.00053
42	0.00114	0.00077	0.00114	0.00077	0.00000	0.00058
43	0.00122	0.00085	0.00122	0.00085	0.00000	0.00066
44	0.00130	0.00094	0.00130	0.00094	0.00000	0.00075
45	0.00140	0.00103	0.00140	0.00103	0.00000	0.00086
46	0.00151	0.00112	0.00151	0.00112	0.15000	0.00098
47	0.00162	0.00122	0.00162	0.00122	0.15000	0.00110
48	0.00173	0.00133	0.00173	0.00133	0.15000	0.00125
49	0.00186	0.00143	0.00186	0.00143	0.15000	0.00141
50	0.00200	0.00155	0.00200	0.00155	0.07000	0.00161
51	0.00214	0.00168	0.00535	0.00234	0.07000	0.00183
52	0.00229	0.00181	0.00553	0.00246	0.07000	0.00207
53	0.00245	0.00197	0.00564	0.00265	0.07000	0.00236
54	0.00262	0.00213	0.00572	0.00290	0.07000	0.00267
55	0.00281	0.00232	0.00580	0.00319	0.15000	0.00303
56	0.00303	0.00253	0.00590	0.00353	0.15000	0.00345
57	0.00331	0.00276	0.00612	0.00393	0.15000	0.00392
58	0.00363	0.00301	0.00644	0.00438	0.15000	0.00444
59	0.00400	0.00329	0.00690	0.00492	0.15000	0.00505
60	0.00441	0.00360	0.00749	0.00553	0.15000	0.00732
61	0.00488	0.00393	0.00820	0.00620	0.15000	0.00732
62	0.00538	0.00429	0.00900	0.00692	0.15000	0.00732
63	0.00592	0.00466	0.00991	0.00769	0.15000	0.00732
64	0.00647	0.00504	0.01095	0.00851	0.15000	0.00732
65	0.00703	0.00543	0.01212	0.00939	0.24000	0.00732

PRIOR YEAR ASSUMPTIONS

VALUATION INTEREST RATE: 8%

Back-DROP: Members eligible for Back-DROP are assumed to take the benefit with the greatest present value.

GLOSSARY

Accrued Benefit – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

Actuarial Accrued Liability – The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

Actuarial Assumptions - Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

Actuarial Cost Method – A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

Actuarial Equivalence – Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

Actuarial Gain (Loss) – The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

Actuarial Present Value - The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if \$600 invested today will be worth \$1,000 in 10 years and there is a 50% probability that a person will live 10 years, then the actuarial present value of \$1,000 payable to that person if he should survive 10 years is \$300.

Actuarial Value of Assets - The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

Asset Gain (Loss) - That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization Payment - That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

Contribution Shortfall (Excess) - The difference between contributions recommended in the prior valuation and the actual amount received.

Decrements – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

Employer Normal Cost - That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

Funded Ratio – A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

Normal Cost - That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

Pension Benefit Obligation - The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

Projected Benefits – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

Unfunded Actuarial Accrued Liability - The excess of the actuarial accrued liability over the actuarial value of assets.

Vested Benefits - Benefits that the members are entitled to even if they withdraw from service.

NOTES